APRIL/MAY 2025

23PCS12 — OBJECT – ORIENTED ANALYSIS AND DESIGN AND C++

Time : Three hours Maximum : 75 marks

SECTION A — (10 × 2 = 20 marks)

Answer ALL the questions.

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1. Differentiate – Classes and Objects.
2. What is meant by an Object State?
3. Define the term – Aggregation.
4. What are Key abstractions?
5. Mention any two advantages of Object-oriented Programming.
6. What are Inline functions?
7. Specify the advantage of Inheritance.
8. Define the term – Array.
9. What is Polymorphism?
10. How to declare and initialize a String object?

SECTION B — (5 × 5 = 25 marks)

Answer ALL the questions.

11. (a) Discuss briefly on the Elements of Object model.

Or

(b) Describe about the Relationship among Objects.

12. (a) Explain the Interplay of Classes and objects.

Or

(b) Discuss on the Nature of a Class.

13. (a) Describe the syntax of 'switch()-case' statement with example.

Or

(b) Explain the concept of Function overloading using an example.

14. (a) Discuss on the types of Constructors.

Or

(b) Describe the basics of Pointers.

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15. (a) Explain the method of Checking for Errors in Files, finding End-of-File, and the File opening modes.

Or

(b) Write short notes on Templates.

SECTION C — (3 × 10 = 30 marks)

Answer any THREE questions.

16. Explain the Evolution of Object model in detail.

17. Describe the method of Identifying Classes and Objects.

18. Discuss on the Formatted Console I/O Operations.

19. Explain the Single, Multilevel, and Multiple Inheritance mechanisms.

20. Describe the purpose of various String handling functions.

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